

## Claims

1. An at-home medical consultation system which provides an at-home medical consulting service by connecting a patient terminal having a videophone function to a doctor terminal having a videophone function through a communication line, the at-home medical consultation system comprising:

a reception server for accepting a request for medical consultation from the patient terminal; and

a communication server for providing a bidirectional communication function of video and audio by connecting the patient terminal whose request for medical consultation has been accepted to the doctor terminal; wherein

the communication server includes a function for setting a virtual waiting room for providing a conversation service by video and audio among the patient terminals; and

the reception server includes a function for connecting the patient terminal whose request for medical consultation has been accepted to the virtual waiting room that has been set.

2. The at-home medical consultation system according to claim 1, wherein the communication server includes a function for connecting a waiting room terminal having a videophone function installed in a waiting room of a hospital to the virtual waiting room that has been set.

3. The at-home medical consultation system according to claim 1 or 2, wherein:

the reception server includes a function for selecting a callee terminal connected to the virtual waiting room based on a position in a screen specified by a pointing device at the caller terminal connected to the virtual waiting room; and

the communication server includes a function for providing a conversation service by video and audio by connecting the caller terminal to the callee terminal separately.

4. The at-home medical consultation system according to in any one of claims 1 to 3, wherein:

the reception server includes a function for accepting a nurse call from the patient terminal and notifying it to a nurse terminal having a videophone function; and

the communication server includes a function for providing a conversation service by video and audio by connecting the patient terminal whose nurse call has been accepted to the notified nurse terminal.

5. The at-home medical consultation system according to claim 4, wherein the patient terminal includes a nurse call button for transmitting a nurse call to the reception server, and includes a function for logging in to the reception server automatically, when the nurse call button is pressed to transmit the nurse call.

6. The at-home medical consultation system according to claim 4 or 5, wherein:

the communication server includes a function for setting a virtual nursing room to which is connected the patient terminal used by a person who needs nursing; and

the reception server includes a function for connecting the patient terminal used by the person who needs nursing to the virtual nursing room upon a request from the patient terminal, the doctor terminal or the nurse terminal; and

the communication server includes a function for transmitting the video and audio of the patient terminals connected to the virtual nursing room to the doctor terminal and/or the nurse terminal upon a request from the doctor terminal and/or the nurse terminal.

7. The at-home medical consultation system according to claim 6, wherein:

the reception server includes a function for selecting a patient terminal connected to the virtual nursing room based on a position in a screen specified by the pointing device at the doctor terminal and/or the nurse terminal; and

the communication server includes a function for providing a conversation service by video and audio by connecting the doctor terminal and/or the nurse terminal to the selected patient terminal separately.

8. The at-home medical consultation system according to

claim 6 or 7, wherein:

the patient terminal includes medical examination sensors for collecting the data necessary for consulting the patient, and includes a function for obtaining the data of the medical examination sensors and transmitting them to the communication server;

the transmission server includes a function for receiving the transmitted data of the medical examination sensors and transmitting them to the doctor terminal and/or the nurse terminal; and

the doctor terminal and/or the nurse terminal include a function for receiving the transmitted data of the medical examination sensors and displaying them.

9. The at-home medical consultation system according to claim 8, wherein the patient terminal includes a function for transmitting part or whole of the signals of the medical examination sensors as audio signals.

10. An at-home medical consultation system which provides an at-home medical consulting service by connecting a patient terminal having a videophone function to a doctor terminal having a videophone function through a communication line, the at-home medical consultation system comprising:

a reception server for accepting a request for medical consultation from the patient terminal; and

a communication server for providing a bidirectional

communication function of video and audio by connecting the patient terminal whose request for medical consultation has been accepted to the doctor terminal; wherein

the communication server includes a function for setting a virtual nursing room to which is connected the patient terminal used by a person who needs nursing;

the reception server includes a function for connecting the patient terminal used by the person who needs nursing to the virtual nursing room upon a request from the patient terminal, the doctor terminal or the nurse terminal having the videophone function;

the communication server includes a function for transmitting video and audio of the patient terminals connected to the virtual nursing room to the doctor terminal and/or the nurse terminal upon a request from the doctor terminal and/or the nurse terminal; and

the doctor terminal and/or the nurse terminal includes a function for displaying the transmitted videos of the patient terminals that have been connected to the virtual nursing room.

11. The at-home medical consultation system according to claim 10, wherein:

the reception server includes a function for selecting the patient terminal connected to the virtual nursing room based on a position in a screen specified by a pointing device at the doctor terminal and/or the nurse terminal; and

the communication server includes a function for providing a conversation service by video and audio by connecting the doctor terminal and/or the nurse terminal to the selected patient terminal separately.

12. The at-home medical consultation system according to claim 10 or 11, wherein:

the reception server includes a function for accepting the nurse call from the patient terminal and notifying it to the nurse terminal; and

the communication server includes a function for providing a conversation service by video and audio by connecting the patient terminal whose nurse call has been accepted to the notified nurse terminal.

13. The at-home medical consultation system according to claim 12, wherein the patient terminal includes a nurse call button for transmitting a nurse call to the reception server, and includes a function for logging into the reception server automatically, when the nurse call button is pressed to transmit the nurse call.

14. The at-home medical consultation system according to any one of claims 10 to 13, wherein:

the patient terminal includes medical examination sensors for collecting the data necessary for consulting the patient, and includes a function for obtaining the data of the medical examination sensors and transmitting them to the

communication server;

the transmission server includes a function for receiving the transmitted data of the medical examination sensors and transmitting them to the doctor terminal and/or the nurse terminal; and

the doctor terminal and/or the nurse terminal include a function for receiving the transmitted data of the medical examination sensors and for displaying them.

15. The at-home medical consultation system according to claim 14, wherein the patient terminal includes a function for transmitting part or whole of the signals of the consulting sensors as audio signals.

16. An at-home medical consultation system which provides an at-home medical consulting service by connecting the patient terminal having a videophone function to the doctor terminal having a videophone function through a communication line, the at-home medical consultation system comprising:

a reception server for accepting a request for medical consultation from the patient terminal; and

a communication server for providing a bidirectional communication function of video and audio by connecting the patient terminal whose request for medical consultation has been accepted to the doctor terminal; wherein

the reception server includes a function for accepting a nurse call from the patient terminal and notifying it to the



nurse terminal having the videophone function; and

the communication server includes a function for providing a conversation service by video and audio by connecting the patient terminal whose nurse call has been accepted to the notified nurse terminal.

17. The at-home medical consultation system according to claim 16, wherein the patient terminal includes a nurse call button for transmitting a nurse call to the reception server, and includes a function for logging in to the reception server automatically when the nurse call button is pressed to transmit the nurse call.

18. The at-home medical consultation system according to any one of claims 1 to 17, wherein the reception server includes a function for accepting a request for a medication from the patient terminal, a function for requesting the doctor terminal used by a doctor in charge of the patient whose request for the medication has been accepted to confirm the medication, and a function for delivering a prescription issued by the doctor terminal in response to the request to a pharmacopoeia terminal used by a pharmacopoeia that offers a home delivery service of medicine.

19. The at-home medical consultation system according to any one of claims 1 to 18, wherein the reception server includes a function for accepting a request for counseling from the patient terminal, a function for receiving counseling



sentences from the patient terminal whose request for counseling has been accepted, a function for transmitting the received counseling sentences to the doctor terminal used by the doctor in charge, a function for receiving reply sentences from the doctor terminal in response to the transmitted counseling sentences, and a function for transmitting the received reply sentences to the patient terminal whose request for counseling has been accepted.

20. The at-home medical consultation system according to any one of claims 1 to 19, wherein the reception server includes a function for accepting a reservation of visit consultation from the patient terminal.

21. An at-home medical consultation method which provides an at-home medical consulting service by connecting a patient terminal having a videophone function to a doctor terminal having a videophone function through a communication line, the at-home medical consultation method comprising:

- a step of accepting a request for medical consultation from the patient terminal; and

- a step of providing a bidirectional communication function of video and audio by connecting the patient terminal whose request for medical consultation has been accepted to the doctor terminal; wherein

- the step of providing the bidirectional communication of video and audio includes:

~~a step of setting a virtual waiting room for providing~~  
a conversation service by video and audio among the accepted  
patient terminals; and

the step of accepting the request for medical  
consultation includes a step of connecting the patient  
terminal whose request for medical consultation has been  
accepted to the virtual waiting room that has been set.

22. The at-home medical consultation method according to  
claim 21, wherein the step of providing the bidirectional  
communication of video and audio includes a step of connecting  
a waiting room terminal having a videophone function installed  
in a waiting room of a hospital to the virtual waiting room  
that has been set.

23. The at-home medical consultation method according to  
claim 21 or 22, wherein:

the step of accepting the request for medical  
consultation includes a step of selecting a callee terminal  
connected to the virtual waiting room based on a position in  
a screen specified by a pointing device at the caller terminal  
connected to the virtual waiting room; and

the step of providing the bidirectional communication  
of video and audio includes a step of providing a conversation  
service by video and audio by connecting the caller terminal  
to the callee terminal separately.

24. The at-home medical consultation method according to any

one of claims 21 to 23, wherein:

the step of accepting the request for medical consultation includes a step of accepting a nurse call from the patient terminal and notifying it to a nurse terminal having a videophone function; and

the step of providing the bidirectional communication of video and audio includes a step of providing a conversation service by video and audio by connecting the patient terminal whose nurse call has been accepted to the notified nurse terminal.

25. The at-home medical consultation method according to claim 24, wherein:

the step of providing the bidirectional communication of video and audio includes a step of setting a virtual nursing room to which is connected the patient terminal used by a person who needs nursing;

the step of accepting the request for medical consultation includes a step of connecting the patient terminal used by the person who needs nursing to the virtual nursing room upon a request from the patient terminal, the doctor terminal or the nurse terminal; and

the step of providing the bidirectional communication of video and audio includes a step of transmitting the video and audio of the patient terminals connected to the virtual nursing room to the doctor terminal and/or the nurse terminal

upon a request from the doctor terminal and/or the nurse terminal.

26. The at-home medical consultation method according to claim 25, wherein:

the step of accepting the request for medical consultation includes a step of selecting a patient terminal connected to the virtual nursing room based on a position in a screen specified by the pointing device at the doctor terminal and/or the nurse terminal; and

the step of providing the bidirectional communication of video and audio includes a step of providing a conversation service by video and audio by connecting the doctor terminal and/or the nurse terminal to the selected patient terminal separately.

27. The at-home medical consultation method according to claim 25 or 26, wherein the step of providing the bidirectional communication of video and audio includes a step of receiving the data obtained from the medical examination sensors provided at the patient terminal and transmitting them to the doctor terminal and/or the nurse terminal.

28. An at-home medical consultation method which provides an at-home medical consulting service by connecting a patient terminal having a videophone function to a doctor terminal having a videophone function through a communication line, the at-home medical consultation method comprising:

a step of accepting a request for medical consultation from the patient terminal; and

a step of providing a bidirectional communication function of video and audio by connecting the patient terminal whose request for medical consultation has been accepted to the doctor terminal; wherein

the step of providing the bidirectional communication of video and audio includes a step of setting a virtual nursing room to which is connected the patient terminal used by the person who needs nursing;

the step of accepting the request for consultation includes a step of connecting the patient terminal used by the person who needs nursing to the virtual nursing room upon a request from the patient terminal, the doctor terminal or the nurse terminal having the videophone function; and

the step of providing the bidirectional communication of video and audio includes a step of transmitting the video and audio of the patient terminals connected to the virtual nursing room to the doctor terminal and/or the nurse terminal upon a request from the doctor terminal and/or the nurse terminal.

29. The at-home medical consultation method according to claim 28, wherein:

the step of accepting the request for medical consultation includes a step of selecting the patient terminal

connected to the virtual nursing room based on a position in a screen specified by a pointing device at the doctor terminal and/or the nurse terminal; and

the step of providing the bidirectional communication of video and audio includes a step of providing a conversation service by videos and audios by connecting the doctor terminal and/or the nurse terminal to the selected patient terminal separately.

30. The at-home medical consultation method according to claim 28 or 29, wherein the step of accepting a request for medical consultation includes a step of accepting the nurse call from the patient terminal and notifying it to the nurse terminal; and

the step of providing the bidirectional communication of video and audio includes a step of providing a conversation service by video and audio by connecting the patient terminal whose nurse call has been accepted to the notified nurse terminal.

31. The at-home medical consultation method according to any one of claims 28 to 30, wherein the step of providing the bidirectional communication of video and audio includes a step of receiving the data obtained by the medical examination sensors provided at the patient terminal and of transmitting them to the doctor terminal and/or the nurse terminal.

32. An at-home medical consultation method which provides

an at-home medical consulting service by connecting a patient terminal having a videophone function to a doctor terminal having a videophone function through a communication line, the at-home medical consultation method comprising:

a step of accepting a request for consultation from the patient terminal; and

a step of providing a bidirectional communication function of video and audio by connecting the patient terminal whose request for medical consultation has been accepted to the doctor terminal; wherein

the step of accepting the request for medical consultation includes a step of accepting a nurse call from the patient terminal and notifying it to a nurse terminal having a videophone function; and

the step of providing the bidirectional communication by video and audio includes a step of providing a conversation service by video and audio by connecting the patient terminal whose nurse call has been accepted to the notified nurse terminal.

33. The at-home medical consultation method according to any one of claims 21 to 32, wherein the step of accepting a request for medical consultation includes a step of accepting a request for a medication from the patient terminal, a step of requesting the doctor terminal used by the doctor in charge of the patient whose request for the medication has been accepted to confirm



the medication, and a step of delivering a prescription issued by the doctor terminal in response to the request to a pharmacopoeia terminal used by a pharmacopoeia that offers a home delivery service of medicine.

34. The at-home medical consultation method according to any one of claims 21 to 33, wherein the step of accepting the request for consultation includes a step of accepting a request for counseling from the patient terminal, a step of accepting counseling sentences from the patient terminal whose request for counseling has been accepted, a step of transmitting the received counseling sentences to the doctor terminal used by the doctor in charge, a step of receiving reply sentences from the doctor terminal in response to the transmitted counseling sentences, and a step of transmitting the received reply sentences to the patient terminal whose request for counseling has been accepted.

35. The at-home medical consultation method according to any one of claims 21 to 34, wherein the step of accepting a request for medical consultation includes a step of accepting a reservation of visit consultation from the patient terminal.

36. An at-home medical consultation program for executing, by using a computer, the at-home medical consultation method described in any one of claims 21 to 35.